

# TO THE MILL AND BACK

Fairfield's Ash Creek Corduroy Road



STATE ARCHAEOLOGICAL PRESERVE



CONNECTICUT STATE HISTORIC PRESERVATION OFFICE



# Acknowledgments



The Ash Creek Open Space is an important element of Fairfield's Open Space Program, which preserves more than 1,100 acres of town-owned natural areas for public benefit (Photo courtesy of Connecticutwilderness.com)

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On the cover: The cedar logs, or "punchings," that constituted the heart of the Ash Creek Corduroy Road are still visible along the creek's western bank (Photo by R. Christopher Goodwin & Associates)



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# OVERVIEW

In colonial New England, dirt roads and trails were the chief routes of overland transport, and low-lying muddy or swampy terrain posed significant impediments to travel. One common solution was the corduroy road, which was created by laying a bed of logs, covered in sand, perpendicular to the roadbed. Although shifting logs with-

in roadbeds could be hazardous for horses and humans, these roads persisted well into the nineteenth century. Indeed, a few functioning corduroy roads could be found along the Eastern Seaboard as late as the early twentieth century. In Connecticut, portions of two corduroy roads are known to remain. One lies beneath marsh peat in Guilford. The other, which is older than the Guilford Road, borders Ash Creek, a salt marsh estuary in Fairfield. It, too, is embedded in peat.

# FOUNDING OF FAIRFIELD

Fairfield was among the earliest towns settled by English colonists in what was known as the Connecticut Colony; its settlement was preceded only by Hartford, Stratford, Windsor, and Wethersfield. These early towns of the Connecticut colony were founded under the administrative umbrella of the Fundamental Orders, a constitution of sorts that laid out the colony's governmental structure and the key rights of its citizens. Fairfield's founding dates to 1639, when Roger Ludlow, the principal author of the Fundamental Orders, purchased a large parcel of land from sachems of the Pequonnock tribe. Additional parcels to the west were acquired in subsequent years. However, as the regional population grew in the eighteenth and nineteenth centuries, traveling to the center of Fairfield to worship became a hardship for some, and people in several settled areas of the large township petitioned to create their own congregations. One by one, these petitions were approved, and Fairfield shrank as it spun off new towns. By this means, Stratfield, West Parish of Fairfield (a.k.a. Green's Farm, now known as Greens Farm), Redding, and Greenfield Hill were created in the 1720's and 1730's. Redding was formally incorporated in 1767. In later years,



Colonists and early Americans built corduroy roads to negotiate soggy low-lying terrain (Photograph from the Alaska Highway Scrapbook ca. 1942-3; Office of History, Headquarters, U.S. Army Corps of Engineers, Alexandria, Va.)

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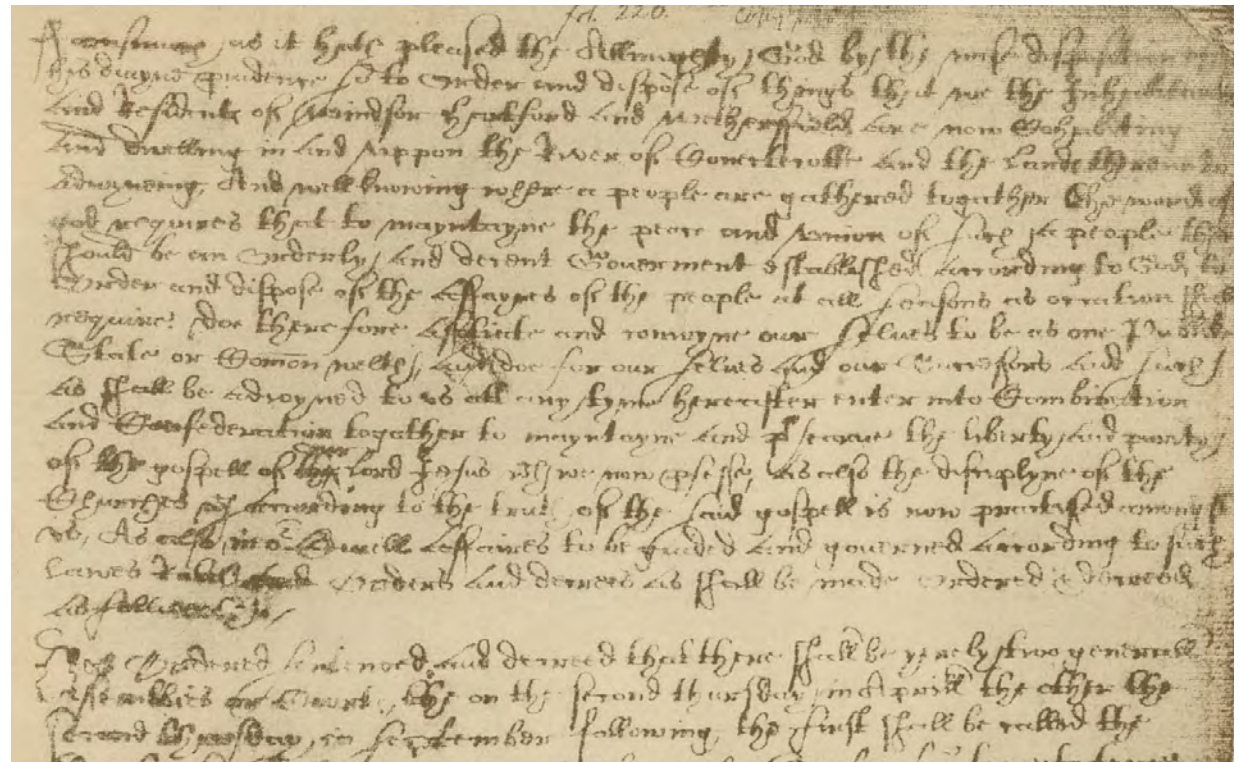
This excerpt from an 1848 Nautical Chart shows the tide mill near the mouth of Ash Creek (a.k.a. Fairfield Creek) (Source: NOAA Office of Coast Survey, Historical Map and Chart Collection)

# The Fundamental Orders:

## America's First Constitution?

In January 1639, representatives of the towns of Windsor, Wethersfield, and Hartford gathered in Hartford to frame a governing document for the newly founded Connecticut colony. Among the most influential of those representatives was Roger Ludlow, who a few years later would lead the first settlers of the town of Fairfield. The document that the creators framed and adopted was known as the Fundamental Orders, and it served as the primary legal framework for the Connecticut colony from that moment until 1662.

The Fundamental Orders have been described as “America’s first constitution,” but it was far from the democratic document that the U.S. Constitution would become. To the contrary, while the Constitution is based on a belief that the welfare of the community is best guaranteed by respecting individual rights and liberties, the Fundamental Orders focused on the well-being of the community ahead of everything, and on the organization and corporate needs of member communities. Although it was an underlying premise of the Fundamental Orders that government must respect the rights of individuals, the document focused primarily on the organization and conduct of the government, or the “combination,” without articulating a list of individual rights.



The Fundamental Orders of Connecticut (Source: Connecticut State Library)

# Roger Ludlow, Founder



*Oxford-educated lawyer Roger Ludlow helped to frame the Fundamental Orders and subsequently founded the township of Fairfield (Source: "Purchase of Norwalk" by Harry Townsend, 1937; mural currently in Norwalk City Hall)*

of Boston. Although Ludlow was appointed magistrate in the colony's Court of Assistance in 1635, he decided to remove, along with a group of other Puritans and Congregationalists, to the area around Hartford. However, the newly relocated settlers were challenged by others who had arrived earlier. They also were challenged by the Pequot natives, who claimed the portion of the Connecticut River Valley that stretched from Hartford south to Saybrook at the river's mouth. Following a confrontation at Mystic (the "Mystic massacre") between the Pequots and an ad hoc militia of 70 colonists who had been sent to hunt them down, Ludlow pursued the remaining Indians west along the coast to Unquowa, along the salt marshes west of the Pequonnock River. (In the early years after European settlement, the tidal river that we know today as Ash Creek was called the Uncoway River.) After dispatching the Pequots in what came to be known as the Swamp War, Ludlow negotiated the purchase of a large area of the nearby "fair fields" from a local sachem, and there founded the town of Fairfield.

Fairfield's founder, Roger Ludlow (variously spelled Ludlowe), was born in southern England in 1590. After graduating from Oxford University in 1612, Ludlow entered into service of the law as a member of London's Middle Temple. Eighteen years later, he and his wife, Mary Ludlow (née Cogan), left London and sailed to America. Mary was a sister-in-law of John Endicott, the governor of the Massachusetts Bay Colony, and the Ludlows settled in the town of Dorchester on the southern periphery

Records suggest that Ludlow became irascible, and even something of a bully, as he advanced in age. After living in Fairfield for almost 20 years, he was made to stand trial for slander for falsely accusing Mrs. Thomas Staples, a Fairfield resident, of being a witch. He had other reversals as well, including a failed bid to be appointed commander of a militia being organized to fight the Dutch. In 1654, Roger and Mary left the town and sailed to Ireland, landing in Dublin in the fall

of that year. Almost immediately after arriving, he was appointed an adviser to the British Council there on matters of property law, a legal topic to which he was no stranger. After serving a term of four years, Ludlow was reappointed in 1758. Considering the sensitivity of matters related to land ownership under British rule in Ireland, it may well be that Ludlow's appointment was approved directly by Oliver Cromwell.

Mary Ludlow died in 1664 and is buried in the cemetery of St. Michan Church in Dublin, which she attended with her husband. Roger Ludlow died sometime afterward, but any church records associated with his death have been lost.



*A nineteenth century engraving depicts a militia commanded by Roger Ludlow defeating Pequot warriors in the marshes at the edge of Fairfield in 1635 (Source: Library of Congress)*

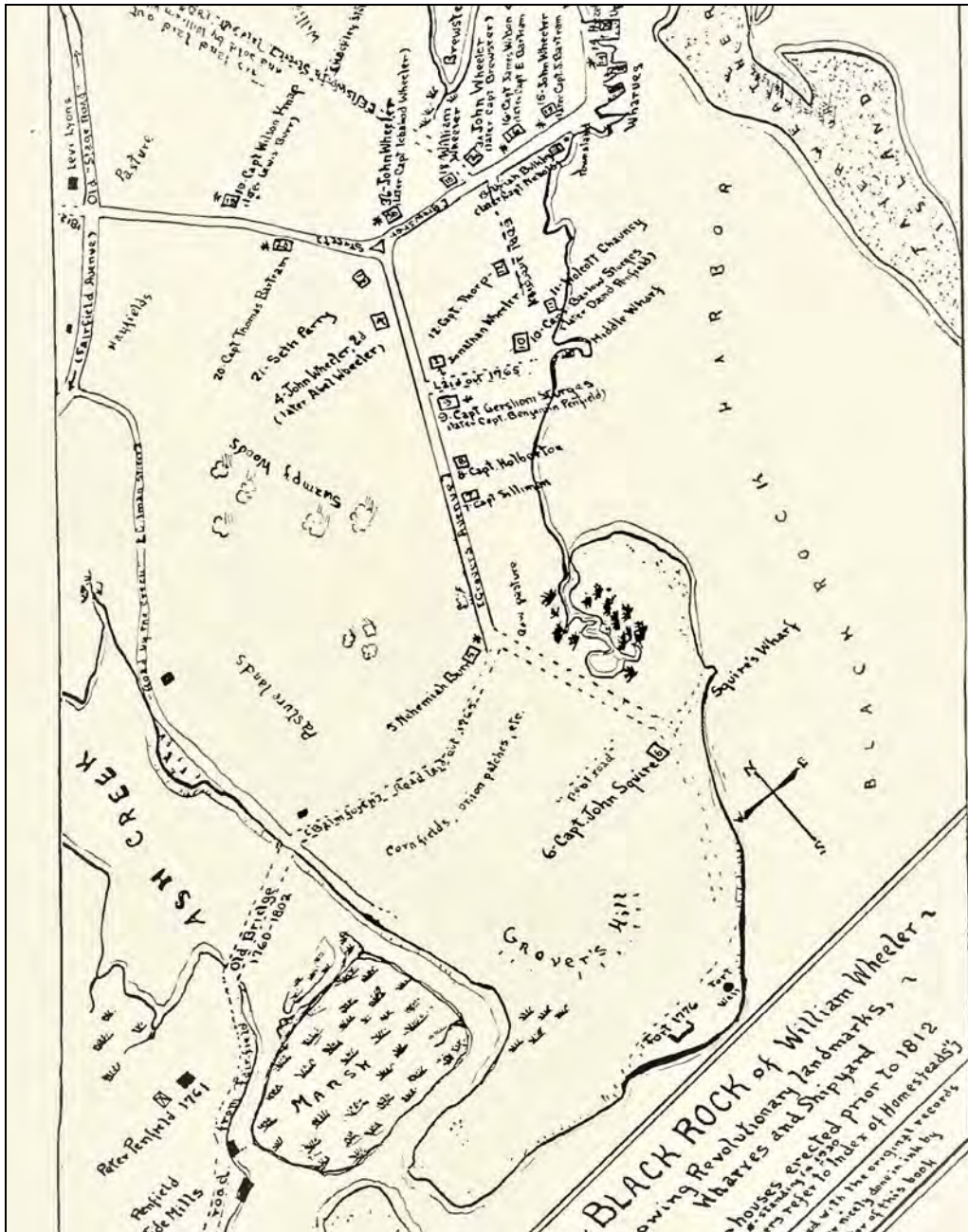
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Weston (1787), Bridgeport (1821), and Westport (1835) were created on lands that originally were part of Fairfield.

From the beginning of the colonial period, agriculture in Connecticut was centered in the rich alluvial valley of the Connecticut River, which supplied produce for much of New England. Away from the Connecticut River drainage, agricultural production dropped off, and few farmers in other parts of the colony produced surpluses that exceeded local need. Still, most towns needed a means to produce flour for local use. Little is known about how this need was fulfilled in the town of Fairfield until the eighteenth century, when Ash Creek became the commercial focus of milling for the community.

## ASH CREEK MILLS

Ash Creek is the name that Fairfield residents have long applied to the lower portion of the Rooster River, which marks the boundary between Fairfield and Bridgeport. There are several references to Ash Creek in municipal records from the eighteenth century. Town minutes from December 23, 1703, note that the “Town grants liberties to Me. John Edwards and Jonathan Sturgis to build a wharf at ye ash house Creek. ...” In 1733, Ebenezer Dimon and Peter Thorp were granted “Liberty to set a Warehouse at ye lower ballas at ye ash house Creek.” On March 27, 1750, Peter Penfield was given “liberty to build a grist mill on the ash house Creek,” and on May 2 of the same year he was given permission to “erect a mill and dam over said creek above the lower ballast where Dimon warehouse stood so as to clear the highway that runs from said ballast to Oliver’s dock so called in any place between that and Capt.



This sketch map shows important structures in the lower Ash Creek area and Black Rock prior to 1812 as described by William Wheeler (Source: Cornelia Penfield Lathrop [1930], *Black Rock: Seaport of Old Fairfield, Connecticut 1644-1870*)



Burrs going over said creek and on the easterly side of the great marsh to make a Dam over that creek in the most convenient place.” Peter Penfield began construction of the approved dam across Ash Creek, and of two grist mills associated with it, one on either side of the creek, that would use the energy of the falling tide to produce flour for residents of the young settlement of Fairfield. While the daily fluctuations of tides in Ash Creek provided a convenient source of power for the mill, those traveling from the mill to town had to traverse the often soggy terrain along the western side of the creek (Elizabeth Schenck, *The History of Fairfield, Volume 2*, [1889]:5-6, 168, 206; Cornelia Lathrop, *Black Rock: Seaport of Old Fairfield*, 1930).

The bumpy, ribbed corduroy road that the townspeople constructed about 1750 to reach Penfield Mills was an economical and serviceable solution. The thin logs that defined the roadbed (sometimes called “punchings”) were cedar, a tree species that was common in the area during the eighteenth century. The resiliency of cedar and the fact that the logs were embedded in peat are the main factors responsible for preservation of what is left of the road. Like all corduroy roads, the one along Ash Creek would have required frequent upkeep as the sandy soils spread atop the logs to create the road’s surface eroded.

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The remains of the Ash Creek corduroy road as they appear today (Photo by R. Christopher Goodwin & Associates)



Peter Penfield's grist mill at Ash Creek may have resembled this tidal mill in Maine (Source: Historic American Building Survey Photograph of Perkins Grist Mill; Library of Congress)



Millstones recovered from the vicinity of Penfield's grist mill at Ash Creek (Photo by R. Christopher Goodwin & Associates, Inc.)

The grist mill, a term for devices that grind grain into flour and for the buildings that house those devices, has been around since ancient times. Water-powered mills were present in Greece in the first century BC. By AD 1086, according to the Domesday Survey of that year, England had 5,624 water-powered grist mills. It seems likely that they were just as common in the rest of Europe.

As English settlers began to populate the Eastern Seaboard of North America, many communities established grist mills to process farmers' grains into flour. In an economy where cash was in short supply, the mill operator usually retained a small portion of each farmer's flour (the "miller's toll") in return for the service he provided. The miller then would barter the flour that was not required for his family's needs for other goods or services.

Most water mills in the American colonies used millstones made of granite, a resilient rock readily available along the Appalachian mountain chain from northern New England to Georgia. A typical mill had two gearwheels, the larger of the two was mounted on the waterwheel action and was connected to a smaller gearwheel mounted to a vertical shaft that extended from floor to ceiling. Using a smaller gearwheel ensured that the main shaft, which turned the grinding stone, known as the runner stone, moved faster than the waterwheel. The runner stone rolled over a fixed horizontal bed, which was really another millstone laid on its side. The proximity of the milling stone to the bed could be adjusted, allowing the miller to adjust the grade of flour. Flour was collected from the bed as it escaped through grooves in the runner stone. The process was similar regardless of whether grains like wheat or barley were milled or whether maize was ground for cornmeal. Beginning in the late nineteenth century, water-driven grist mills were gradually supplanted by mills powered by electricity and fossil fuels.



Marshes in the Ash Creek estuary teem with life (Photo: [www.ashcreekassoc.org](http://www.ashcreekassoc.org))

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At its terminus near one of the grist mills, the corduroy road linked to a bridge that crossed Ash Creek to the eastern shore of the creek, where it connected to a road that led to Black Rock Harbor. Construction of the bridge appears to have been a community endeavor, as indicated by town minutes from 1753 recording the decision that townsmen would “work one day at ye bridge proposed to be made over ye ash house Creek or grate creek so called.” (Elizabeth Schenck, *The History of Fairfield, Volume 2*, [1889]:206). Both the road and the bridge were still visible in 1802. With that avenue of commerce available, Black Rock Harbor quickly became Fairfield’s deepwater port and a center for shipbuilding. With the roads and the bridge in place, residents of the township could transport their products to the docks at Black Rock, and receive goods arriving by ship from Britain and from elsewhere in the American colonies. Ships departing from Black Rock Harbor carried flaxseed, grains, barrel staves, lumber, and dairy products from the region, while incoming vessels brought manufactured goods from Europe and rum, molasses, sugar, and salt from the Caribbean islands (Charles Brilvitch, *Walking Through History: The Seaports of Black Rock and Southport*, 1977).

During the Revolutionary War, Black Rock Harbor quickly became an important port for spies and privateers. Determined to suppress revolutionary activities, the British commander William Tryon devised a plan to exert military control over Black Rock Harbor and the adjacent town of Fairfield. On the afternoon of July 7, 1779, British troops disembarked at McKenzie Point (known today as Kensie Point), a little over a mile west of Ash Creek. Colonial militia attempted to defend the town, firing on the British troops as they advanced inland. Fairfield residents then set fire to the

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Control of Black Rock Harbor, a haven for revolutionary privateers and smugglers, was a factor in the British incursion of July 1779. The “rebel fort” depicted in this British map is known as Black Rock Fort (Source: Louis F. Middlebrook [1925], *History of Maritime Connecticut during the American Revolution, 1775-1783*)

# GREAT SALT MARSH ISLAND



*Nature's centerpiece in Ash Creek: Great Salt Marsh Island (photo courtesy of Ash Creek Conservation Association)*

Great Salt Marsh Island can be considered nature's centerpiece in the Ash Creek estuary. About half of its 14 acres lie in the town of Fairfield, while the remainder are part of Bridgeport. Since 2005 the island has been a conservation zone, protected from development and managed by the Aspetuck Land Trust.

The biological diversity of the island and its associated marshlands in the tidal estuary is remarkable. It provides a breeding ground for recreational fish like bluefish and flounder, along with smaller species such as minnows and killifish. Common invertebrates include mussels and fiddler crabs, which roam the marshes by the hundreds. Opossums and raccoons come to the shoreline to feed on fish and shellfish, and innumerable bird species visit the marshes at least seasonally. Frequently observed bird species include marsh wrens and the blue and white kingfisher. Great Salt Marsh Island also provides a warm-weather home to a mating pair of ospreys that come to the island each March to begin their summer-in-residence before retiring to a more southerly climate for the cold months.



Log “punchings” of the corduroy road eroding from the bank of Ash Creek with Great Marsh Island in the distance (Photo by R. Christopher Goodwin & Associates, Inc.)

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bridge over Ash Creek. When General Tryon attempted to bring additional troops into the town by advancing from the back side near Black Rock, the burned-out bridge frustrated their advance. In retaliation, British troops burned most of the homes in the path. The effect was devastating, as most of the buildings of the town, including the churches, were put to flame. Years would pass before the town would recover. Ten years after the British raid, George Washington made note of the charred remains of homes that dotted the landscape when he visited Penfield’s Tavern in 1779 (Frank Samuel Child, *A Country Parish* [1911]:165; Rita Papazian, *Remembering Fairfield, Connecticut* [2007]).

Today, the remains of the Ash Creek road consist of logs that are exposed along the bank of the creek over a distance of about 53 feet. These logs lie beneath some 16 inches of fine-grained sediments representing accretion over the years from overbank deposition during high tides.

## CORDUROY ROADS IN AMERICAN HISTORY

Log roads have a long history, dating as far back as the Neolithic Period, or New Stone Age, which ended between 4500 BC and 2000 BC. Remains of one such road in Glastonbury, England, date to about 4000 BC. To serve the transportation needs of its far-flung empire, Rome often built corduroy roads to facilitate travel across low-lying terrain. However, corduroy roads reached the zenith of their popularity in the Americas, where they were a common means of traversing muddy and swampy terrain through the nineteenth century as Euro-American settlers expanded their reach throughout the original colonies and then into the territories of the new nation.

The choice of tree species for the roads’ log foundations varied depending on availability. For example, one corduroy road whose remains were discovered in a rural area south-east of Louisville, New York, was created from hemlock logs. Carol Griggs of the Cornell University Tree-Ring Laboratory was able to use established regional tree-ring sequences for hemlocks to determine that the Louisville road was built in 1785, with minor additions in 1796 and early 1797. This dating places construction of the road shortly after the end of the American Revolutionary War, when a large number of loyalists who had



Building a corduroy road near Richmond, Virginia, in June 1862 (photograph by David B. Woodbury; Source: Library of Congress)



Photo of logs of the corduroy road eroding from the bank of Ash Creek with stabilizing stakes visible (Photo by R. Christopher Goodwin & Associates, Inc.)

held out hope for a British victory resolved to leave the newly established republic and move northward to Canada, passing through upstate New York toward destinations in southern Ontario. In any case, this was the period when the upper reaches of New York began to be settled, so the creation of expedient ways to cross low-lying lands would have been timely. (Carol Griggs, *Dendrochronology of the Louisville Corduroy Road Logs*, Louisville, N.Y., (Manuscript) [2008] Cornell Tree-Ring Laboratory, Cornell University, Ithaca, N.Y., and Hartgen Archeological Associates, Inc., Rensselaer, N.Y.)

By the first part of the nineteenth century, population was increasing in the towns and cities of the young country, especially in the Northeast. On rainy days, streets in urban areas could quickly become muddy pits under the wear of pedestrian and carriage traffic. Efforts to

stabilize city roadbeds and keep them passable included construction of log roads. Buffalo, New York, is a good example. One such road, constructed along what is now Main Street in downtown Buffalo, followed the route of an old Native American trail. Known as the Buffalo Road, this thoroughfare was widened in 1801 to 40 feet, with a 16-foot width cleared to ground level and the remainder cleared to stumps. Over the next few years, wear and tear from use and inattention to maintenance left the road in very poor condition. It was at this point that a length of the thoroughfare was given a corduroy surface. By the beginning of the War of 1812, “the road was in the usual condition of most if not all roads... there being very little done except to cut the timber out sufficiently for the passage of teams and the making of causeways over the low and very wet grounds ... The road, from what was afterwards Walden’s Hill to Chippewa Street and to North Church... was covered with a log causeway.” (Parnell Sidway, “Recollection of the Burning of Buffalo,” *Publications of the Buffalo Historic Society* 9 [1906]: 335).

The Civil War witnessed a resurgence in construction of log roads, especially in the rural South. In those years, there were already a few roads in the United States with hard surfaces. These “macademized” roads were generally made from a combination of gravel and cement. However, paved roads were expensive and time-consuming to



build, and they were few in number; the vast majority of roads were dirt. With the onset of the Civil War, the combination of rainfall, the feet of thousands of soldiers, and the impact of hundreds of horses and wagons left many stretches of road virtually impassable for long periods. The corduroy road was the most expedient solution. Still, the cutting and trimming of branches and logs took considerable time, so where fences were present nearby, they often were disassembled and their railings used instead.

Curiously, it seems that most of the corduroy roads constructed during the Civil War were built by Northern troops. However, some were built by the Confederates, including one recently unearthed example in Fairfax, Virginia, where construction of a corduroy road between the Occoquan River and the Fairfax Courthouse began in 1862. In any case, corduroy roads were not always an available solution. One rebel soldier in Virginia wrote a telling account emphasizing "... the incredible quantity and tenacity of the mud," and he reported that "locomotion in rainy or damp weather baffles all description; and to say that I have seen whole wagon trains fast in the road, with mud up to the axles, would afford but a faint idea of the reality. If timber had been plentiful, the roads might have been 'corduroyed' according to the Yankee plan, viz., of piling logs across the road, filling the interstices with small limbs, and covering with mud; but timber was not to be procured for such a purpose; what little there might be was economically served out for fuel." (Richard Harwell, ed., *The Confederate Reader*. Dorset Press [1992], 59).

As the nineteenth century entered its last decades, hard-surface roads became more common in densely populated parts of North America, and construction



Building a corduroy road as part of the Alaska-Canada Highway ca. 1942 (Source: photograph possibly by Staff Sargent R. Schubert, courtesy of Office of History, Headquarters, U.S. Army Corps of Engineers, Alexandria, Va.)

of corduroy roads waned. However, the classic log road remained a viable option for traversing wet terrain in more remote areas well into the twentieth century. In fact, corduroy laid down in 1943 still underlies a 100-mile-long section of the Alaska-Canada Highway in the Yukon.

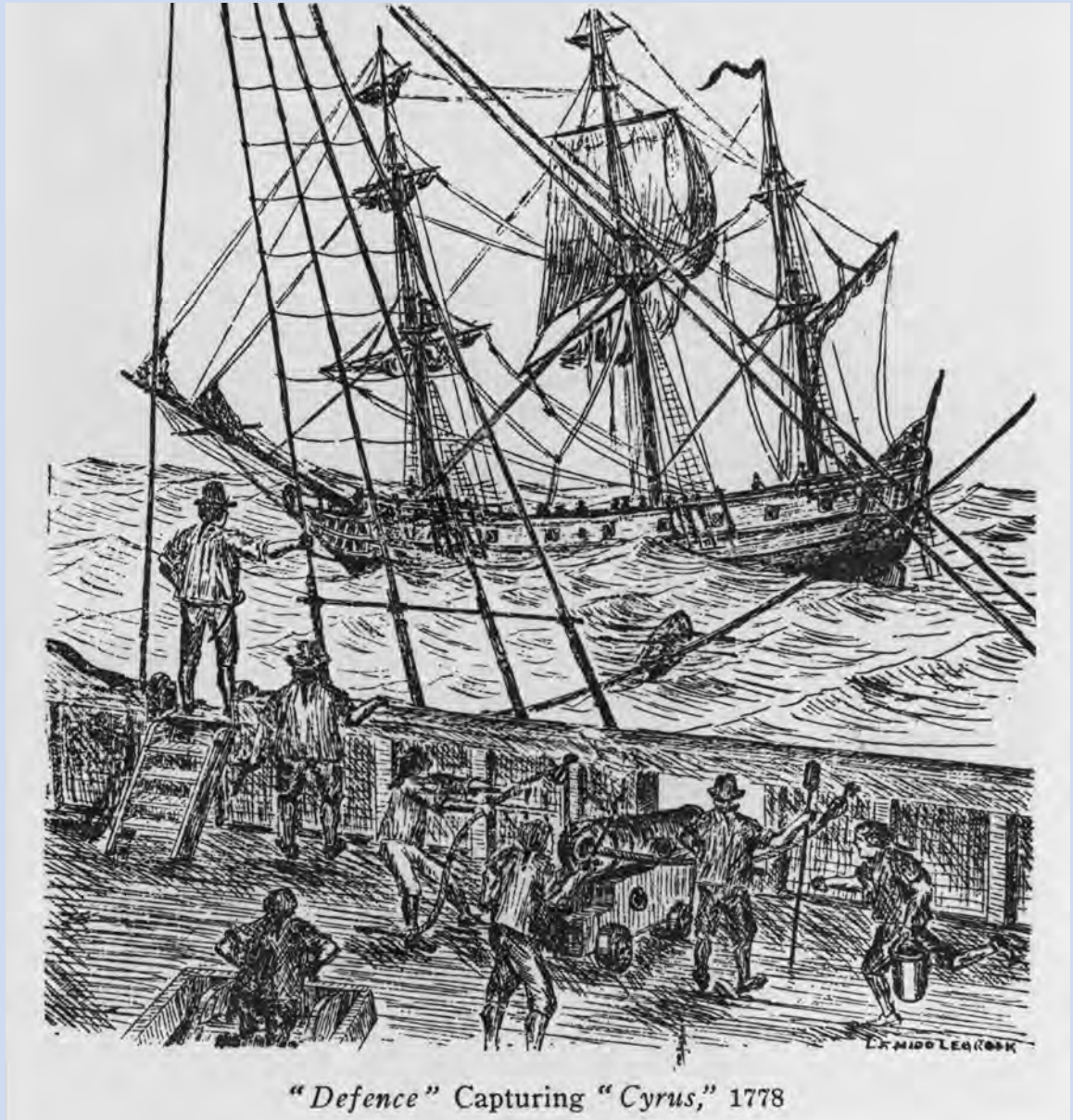


The location of Peter Penfield's Mill near the mouth of Ash Creek (Photo by R. Christopher Goodwin & Associates, Inc.)

## Black Rock Harbor and Ash Creek

The Ash Creek Corduroy Road and the bridge over Ash Creek were constructed to facilitate travel between Fairfield and the growing port of Black Rock Harbor. The harbor was one of two Connecticut ports that could accommodate very large ships (300-400 tons) during the seventeenth and eighteenth centuries. With the exception of Black Rock and New London Harbors, most Connecticut settlements could only accommodate smaller 30-40 ton vessels. In spite of its natural qualities, Black Rock Harbor was only lightly used until the 1760s when the port began to grow rapidly. At this time, three major commercial wharves, 8-10 new houses, and new roads were built, and shipbuilding emerged as a major occupation in the area. Several interrelated factors likely promoted this expansion: the increasing importance of Fairfield; the construction of the Penfield tide mill on Ash Creek in 1750; and, the road and bridge over Ash Creek, which simplified travel between Fairfield and Black Rock Harbor. According to local historians, the focus of shipping shifted from the wharves at Sasco-Mill River (Southport), Saugatuck and Ash Creek to Black Rock Harbor (Justinus 1955). On Ash Creek, permits were granted to John Edwards and John Sturges to build a wharf on the "Uncoway River" (a.k.a. Ash Creek) in 1703 and to Peter Thorp and Ebenezer Dimon to "set a Warehouse at the lower Ballasses [sandbars] at Ashhouse Creek" (Lathrop 1930:141). A small wharf served Black Rock Harbor until 1760, when Samuel Squire built a wharf near Money Beach. Squire's Wharf was soon joined by Middle Wharf (1760) and a new Upper Wharf (1762). Historians record five to six large wharves and several shipyards in Black Rock Harbor from 1750 to 1850 (Justinus 1955:18).

During the Revolutionary War, privateers and spies based in Black Rock Harbor and other Connecticut ports harassed shipping activity in the region. Schenck's *History of Fairfield* notes that Penfield Mills



Long Island Sound was a hornet's nest of privateering during the Revolutionary War. The brigantine *Defence*, assigned to Black Rock Harbor, captured 13 vessels and half a million dollars in booty in her three years of service (Image from Middlebrook (1922) *Exploits of the Connecticut Ship "Defence"*)



**The British landings at New Haven and Fairfield probably looked similar to this illustration of the British landing at Cape Breton in 1745 (Engraving by J. Stevens, “View of the landing of the New England forces in ye expedition against Cape Breton,” 1747)**

provided bread for the Continental Army – James Penfield reportedly baked several barrels of flour daily. As tensions rose at the beginning of the war, the Americans recognized the strategic importance of the harbor and Penfield’s mills and bakehouse on Ash Creek and constructed a fort on Grover Hill between the two. Beginning in 1776 the Black Rock Fort\* was garrisoned by twenty-five men wielding two cannons. Annoyed by rebel resistance in the area and hoping to draw Washington’s troops from their well defended positions in New York, the British launched a series of punitive raids against New Haven, Fairfield, and Norwalk. The people of Fairfield awoke before dawn on July 7, 1779, to a cannon blast shot from the fort, warning that the British fleet was anchored

offshore. According to historians, British soldiers rowed into the mouth of the Ash Creek under the cover of fog and burned the mill, bakehouse, and Penfield homestead (Lathrop, *Black Rock Seaport of Old Fairfield, Connecticut* 1930:10). When the fog lifted, Black Rock Fort’s guns drove the British to land a couple of miles west at McKenzie’s Point. The British landed in the late afternoon, and General Tryon’s troops marched northeast along the beach and then inland while General Garth’s troops that marched north over Sasco Hill with the plan to converge on Fairfield center. Their plan to attack Black Rock Fort was foiled by residents who burned the bridge over Ash Creek. Frustrated in their plan, the British forces set fire to nearly all of the town’s buildings when they withdrew the following day. The destruction was still visible 10 years later. President George Washington observed that “The Destructive evidences of British cruelty are yet visible both in Norwalk & Fairfield; as there are the Chimneys of many burnt houses standing in them yet” (Washington Diary Oct 16, 1789). Fairfield never fully recovered, and the economic center of the county shifted to Bridgeport during the nineteenth century.

*\*not to be confused with Black Rock Fort on New Haven Harbor or fortifications erected on Grover Hill in 1812 sometimes termed Fort Union*



Grapevine Bridge, built by the Fifth New Hampshire Infantry in May 1862 over the bed of the Chickahominy River, Virginia (Photo by David B. Woodbury; Source: Library of Congress)

## LAND TRAVEL IN COLONIAL CONNECTICUT

Land travel in colonial Connecticut was slow, difficult, and unpredictable. For this reason, the earliest settlements were located along the coast and on major rivers so that ships could reach them. The earliest land routes were along trails that served the local Native American tribes well but were inadequate for the colonists' needs. The colonial government soon established "Country Roads" or "King's Highways," which typically ran from plantation to plantation, as well as "public town ways" and "private town ways" that connected local areas.<sup>1</sup>

The earliest land route that appears in colonial records was the Connecticut Path, a Native American trail used in the early 1630s by members of the Nipmunk Tribe and the Massachusetts Bay Colony to travel between the Connecticut River Valley and the mouth of the Charles River. Settlers from the Massachusetts Bay Colony used the trail to travel to the Connecticut Valley to establish Wethersfield and Hartford.<sup>2</sup>

<sup>1</sup> Cecelia S. Kirkorian and Joseph D. Zeranski, "Investigations of a Colonial New England Roadway," *Northeast Historical Archaeology* 10 no. 1 (1981) 1-10 and Isabel S. Mitchell, *Roads and Road-making in Colonial Connecticut*. (New Haven, Yale University Press) 1933.

<sup>2</sup> Old Connecticut Path accessed Sept 24, 2018. [https://en.wikipedia.org/wiki/Old\\_Connecticut\\_Path](https://en.wikipedia.org/wiki/Old_Connecticut_Path); also Wood, Frederic J. *The Turnpikes of New England and the Evolution of the Same Through England, Virginia, and Maryland* (Boston: Marshall Jones, 1919), 25. [Internet Archive version online](#).



Excerpt from Moses Warren and George Gillet's 1812 Map of Connecticut from actual survey showing towns and county boundaries as well as mills. The Penfield Mills are shown at the mouth of Ash Creek and Boston Post Road crossing the creek further upstream (Library of Congress, Geography and Map Division)

In 1634 the Connecticut General Court passed a statute requiring each town to select two surveyors every year to "oversee the mending and repairing of the highways" (Connecticut, Colony of, 1830). Requests for new roads were considered in town meetings. If the selectmen found that a road was necessary, they appointed a committee to lay it out in the "most convenient way, taking care to commit as little damage as possible" and to recommend the amount of compensation due those whose property was crossed.<sup>3</sup> A law passed in 1643 obligated town residents to work on the roads one day a year; this corvée labor was increased

<sup>3</sup> Isabel S. Mitchell, *Roads and Road-making in Colonial Connecticut*. (New Haven, Yale University Press) 1933.



Aerial photo of the lower Ash Creek drainage showing the location of the corduroy road and remains of the bridge and tide mill dams (Photo courtesy of Google Earth).

to two days a year in 1650. Those who failed to meet their annual service “...*forefeit for every dayes neglect of a mans worke two shillings sixpence, and of a Teame, sixe shillings...*” to be used to hire others to complete the work.<sup>4</sup>

In 1670 the Connecticut General Court “*ordered that selectmen in the Plantations [on the Connecticut River] shall lay out a Highway six rods wide upon the upland, on the east side of the Great River.*” However, most roads were probably not this wide, with most narrowing to only three rods in the countryside.<sup>5</sup> The post roads were the principal highways in the region. Lower

<sup>4</sup> *Connecticut, Colony of The Code of 1650*, (Andrus, Silas ed. 1830) pp 49-50.

<sup>5</sup> Isabel S. Mitchell, *Roads and Road-making in Colonial Connecticut*. (New Haven, Yale University Press) 1933.

Post Road ran along the Connecticut shoreline to Kingston, Rhode Island, and then on to Providence and Boston. Middle Post Road ran north through Hartford and Springfield, then turned east to Boston. Throughout the seventeenth and much of the eighteenth century, these major roads remained little more than paths. In the late seventeenth century, the General Court ordered that roads be cleared of brush so that they were at least one rod (about 16 feet) wide.<sup>6</sup>

Early bridges were built by town residents as part of their regular highway service. These bridges were often simple structures consisting of two or three hewn logs placed to allow horses to travel across. “*A strong sufficientt cartt Bridge*” that was ordered to be built across the Little River in Hartford in 1640 was “*to be Twelwe footte wide bettwene the Rayles wth Turned Ballesters over the Top.*”<sup>7</sup> With increasing travel and trade during the eighteenth century, bridges were longer, larger, and more complex, some allowed larger ships to pass up and down the river. A bridge built in Norwich in 1728 was 250 feet long and 20 feet high.<sup>8</sup> Construction of these bridges was costly and sometimes required cost-sharing arrangements between neighboring towns or

<sup>6</sup> Early Travel in Connecticut Before 1895: Colonial Roads. Chapter 1 DOT History, Last Modified on 9/9/2003 accessed Sept 24, 2018. <https://www.ct.gov/dot/cwp/view.asp?a=1380&q=259692> Connecticut Department of Transportation.

<sup>7</sup> Isabel S. Mitchell, *Roads and Road-making in Colonial Connecticut*. (New Haven, Yale University Press) 1933

<sup>8</sup> Isabel S. Mitchell, *Roads and Road-making in Colonial Connecticut*. (New Haven, Yale University Press) 1933

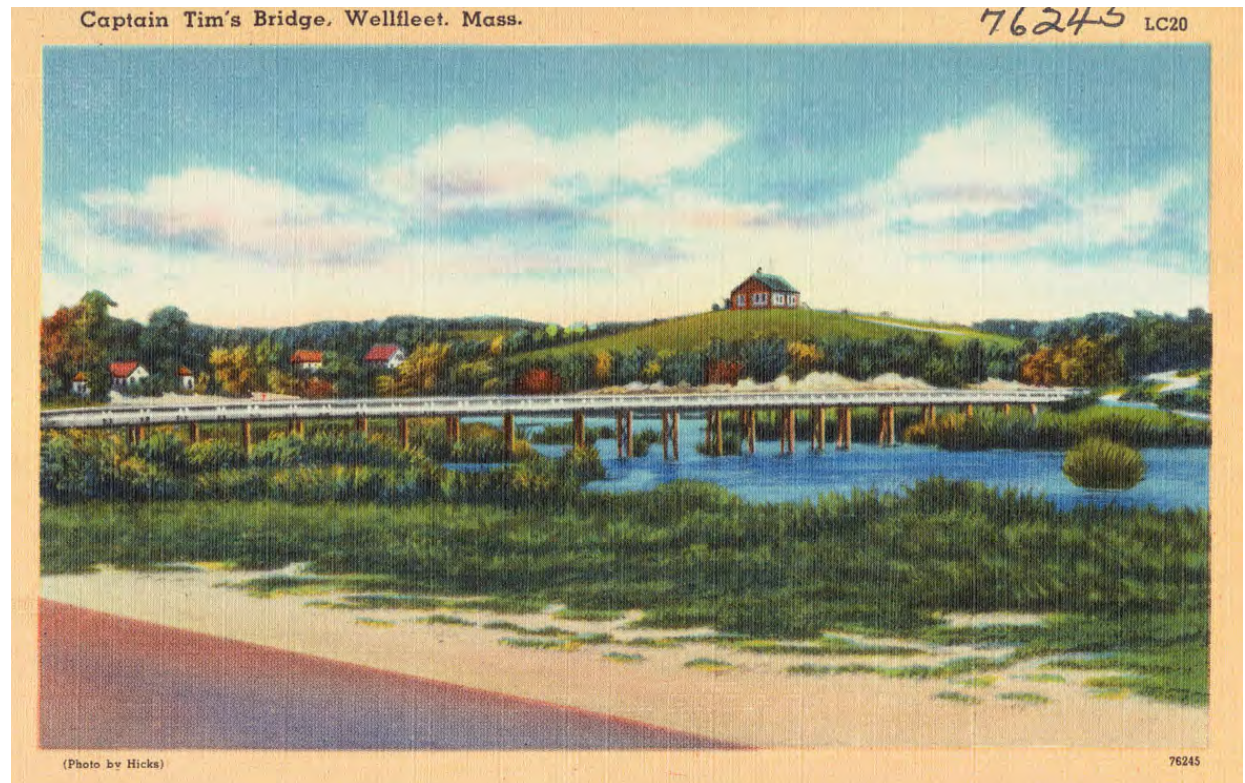
### Ash Creek Corduroy Road

labor sharing arrangements among groups of citizens. Private bridges that were in public use were often taken over by the assembly and the owner was compensated in colony land or money. After 1750, a favorite method of raising funds was lotteries that were authorized by the town.<sup>9</sup>

The American Revolution accelerated the demand for road and bridge building. The newly formed State of Connecticut lacked the public capital to improve the roads, so the assembly granted franchises for the creation of private toll roads in the late eighteenth century. These turnpike corporations were organized to repair and maintain existing roads or to create new roads.

Town ways were more common than highways; these roads connected town centers and residences with agricultural areas, mills, and commercial ports. The bridge over Ash Creek and the corduroy road shortened the trip from Penfield Mills and the Town of Fairfield to the wharves on Black Rock Harbor by over a mile. The town's decision to commit to building the bridge in 1753 was perhaps prompted by the desire to efficiently connect the mills with the growing port. The corduroy road was necessary to traverse the marshy areas located along the creek immediately south of the bridge. Town residents voted on May 20, 1756 "to open a highway from Silliman's bridge to Penfield's mill on

<sup>9</sup> Isabel S. Mitchell, *Roads and Road-making in Colonial Connecticut*. (New Haven, Yale University Press) 1933.



The bridge over Ash Creek may have looked like Captain Tim's Bridge in Wellfleet, Massachusetts, a timber stringer bridge that was built in 1783 (Image courtesy of the Boston Public Library).

Ash-creek." Residents were required to "work one day at ye bridge proposed to be made over ye ash house Creek or grate creek so called."<sup>10</sup> The bridge was probably a simple log or simple truss form, which was limited to a length of less than fifty feet.<sup>11</sup> Traces of the bridge are visible in aerial photographs in the form of a linear gravel feature that extends two-thirds of the way across the creek from the west end of Balmforth Street to the vicinity of the Ash Creek Corduroy Road.

<sup>10</sup> Elizabeth Schenk, *The History of Fairfield, Volume 2* (1889), 206

<sup>11</sup> Bruce Clouette and Matthew Roth, *Connecticut's Historic Highway Bridges*, accessed Sept 24, 2018, <http://www.past-inc.org/historic-bridges/Mainpage.html>





Photograph of the cut ends of the logs and stake in the bank of Ash Creek (Photo by R. Christopher Goodwin & Associates, Inc.)



Logs of the corduroy road eroding from the bank of Ash Creek (Photo by R. Christopher Goodwin & Associates, Inc.)

### For more information:

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## State Archaeological Preserves


The Connecticut Legislature established the State Archaeological Preserve program in 2000 as a way to protect significant archaeological sites. Sites that are listed on the National Register of Historic Places and/or the State Register of Historic Places qualify for designation as a Preserve, whether private or public property. The National Register is the official Federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture worthy of preservation. Similarly, the State Register of Historic Places is a census of historic and archaeological resources that are integral to the development of Connecticut’s distinctive character.

The State Historic Preservation Office, in the Department of Economic and Community Development, is empowered to designate archaeological sites as Preserves (C.G.S. Section 10-384). SHPO, in coordination with the Office of State Archaeology and, when appropriate, the Native American Heritage Advisory Council, works with property owners to nominate significant archaeological sites as Archaeological Preserves. SHPO also maintains the master list of Archaeological Preserves.

Preserves recognize the educational and cultural value, as well as the fragile nature, of archaeological resources. Many of Connecticut’s Preserves are on private land and fall under the protection of property owner rights. Connecticut law provides that, regardless of whether a Preserve is on private or public land, no person shall “excavate, damage, or otherwise alter or deface the archaeological integrity or sacred importance of a preserve. Connecticut General Statutes Section 10-390 provides significant penalties for vandalism and the unlawful collecting of archaeological remains from State Archaeological Preserves.

### Connecticut’s Archaeological Preserves as of January 2019

- 1. Putnam Memorial State Park, Redding and Bethel (1/01)
- 2. Axle Shop-Spring Factory Archaeological Site, Hamden (2/01)
- 3. Kent Iron Furnace, Kent (3/01)
- 4. Newgate Prison and Copper Mine, East Granby (4/01)
- 5. Fifth Camp of Rochambeau's Infantry, Bolton (6/01)
- 6. Fort Wooster Park, New Haven (7/01)
- 7. Fourth Camp of Rochambeau's Army, Windham (12/01)
- 8. Small Pox Hospital Rock, Farmington (9/02)
- 9. New London Engine House & Turntable, New London (4/03)
- 10. Quinebaug River Prehistoric Archaeological District, Canterbury (5/03)
- 11. Aunt Polly, East Haddam (5/03)
- 12. Cornfield Point Light Ship LV51, Old Saybrook (5/03)
- 13. Bridgeport Wood Finishing Company, New Milford (5/03)
- 14. John Brown Birthplace, Torrington (8/03)
- 15. Air Line Railroad, Colchester and East Hampton (12/03)
- 16. Governor Samuel Huntington Homestead, Scotland (2/04)
- 17. Cady-Copp House Archaeological Site, Putnam (5/05)
- 18. World War II “Hellcat” Sites, Preston (11/05)
- 19. Henry Whitfield State Museum, Guilford (4/06)
- 20. Dividend Brook Industrial Archaeological District, Rocky Hill (4/06)
- 21. Fort Griswold State Park, Groton (10/06)
- 22. Ebenezer Story Homestead & Tavern, Preston (10/06)
- 23. Fort Stamford, Stamford (10/06)
- 24. New England Hebrew Farmers of the Emanuel Society Synagogue and Creamery Archaeological Site, Chesterfield (Montville) (9/07)
- 25. Prudence Crandall House Museum, Canterbury (8/08)
- 26. LeBeau Fishing Camp & Weir Site, Killingly (8/08)
- 27. Lighthouse Site, Barkhamsted (12/08)
- 28. CCC Camp Filley, Haddam (12/08)
- 29. Pine Island Archaeological Site, Groton (02/09)
- 30. Ash Creek Corduroy Road, Fairfield (3/09)
- 31. West Parish Meeting House, Westport (2/10)
- 32. Middle Encampment, Redding (08/13)
- 33. Charcoal Mound, Barkhamsted (3/15)
- 34. Walt Landgraf Soapstone Quarry, Barkhamsted (4/15)
- 35. Gail Borden Condensed Milk Factory Site, Torrington (5/15)
- 36. Midway Railroad Roundhouse Archaeological Complex, Groton (6/15)
- 37. Nike Missile Site - HA-36, Portland (8/15)



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